

Serial No. 09/890,807
Reply to Office Action of October 29, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend claims 1, 7, and 8.

Please add new claim 13.

A complete list of the pending claims follows:

1. (Currently Amended) A connector for interconnecting or mutually isolating two or more circuits, comprising

first and second interengageable connector elements each of which is connected in use to a respective circuit and at least one of which supports

a first contact connected to the respective circuit

and a displaceable contact holder carrying interconnected second and third contacts, the contact holder being displaceable between a first position in which the first and second contacts are separated and a second position in which the first and second contacts are interconnected,

wherein the connector elements comprise means for ensuring that on interengagement the contact holder is not displaced from the first to the second position ~~after~~ unless the third contact is interconnected with a contact of the other connector element,

the connector elements comprise means for ensuring that on disengagement the contact holder is displaced from the second to the first position, and

the connector elements comprise means for ensuring that on disengagement the first and second contacts separate before the third contact is separated from the said contact of the other connector element and such that when separated the first and second contacts are located within a closed chamber defined within the said at least one connector element, means being provided for locking the third contact of the

Serial No. 09/890,807
Reply to Office Action of October 29, 2003

contact holder to the said contact of the other connector elements element unless the first and second contacts are separated.

2. (Original) A connector according to claim 1, wherein each connector element supports a respective first contact and a respective displaceable contact holder carrying interconnected second and third contacts such that on interengagement of the connector elements the third contacts are interconnected.

3. (Previously Amended) A connector according to claim 1, wherein means are provided to prevent the contact holder from being blown out of the associated connector element.

4. (Original) A connector according to claim 3, wherein the preventing means comprises a pin received in a slot formed in the contact holder.

5. (Previously Amended) A connector according to claim 1, wherein the contact holder is slidable in a bore such that the closed chamber is defined between the contact holder and walls of the bore.

6. (Previously Amended) A connector according to claim 1, wherein the means for locking the contact holder to the said contact of the other connector elements comprise one or more locking balls which are retained in locking engagement between the connector element and the contact holder unless the contact holder is in the first position.

7. (Currently Amended) A connector according to claim 1, comprising means for locking the contact holder in the first position when the ~~contact~~ connector elements are separated.

8. (Currently Amended) A connector according to claim 7, wherein the locking means maintain the contact holder in the first position unless the ~~contact~~ connector elements are interengaged.

Serial No. 09/890,807
Reply to Office Action of October 29, 2003

9. (Previously Amended) A connector according to claim 8, wherein the locking means comprise a spring-biased slider displaceable as a result of interengagement of the connector elements from one position in which it retains one or more locking balls in locking engagement between the connector element and the contact holder with the contact holder in the first position and a further position in which the locking ball is released and the contact holder is displaceable to the second position.

10. (Cancelled).

11. (Original) A connector according to claim 2, wherein means are provided to prevent each contact holder from being blown out of the associated connector element.

12. (Original) A connector according to claim 11, wherein the preventing means comprises a pin received in a slot formed in the contact holder.

13. (New) A connector according to claim 7, wherein the locking means locks the contact holder in the first position unless the third contact is interconnected with the contact of the other connector element.